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Smart Permits

31 Cities and Counties, Silicon Valley, California

The Regional Evolution and Use of Smart Permit 28 Cities and 3 Counties in Silicon Valley, California

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Smart Permit Data Sheet

The **Smart Permit Initiative**, developed **in** cooperation with a variety **of** public **and** private interests in the greater **Silicon** Valley, California, **area** was designed to streamline the permit development process and provide these processes on the Internet to better serve the business community and other interested parties.

The **Silicon Valley** region is 1,500 square miles in **area** with **a** population of approximately 2.5 million. It is comprised of 31 city and county jurisdictions encompassing the southern half of **the San** Francisco Bay **Area**.

Eight **Pilot Cities** emerged during the course of the Smart Permit Initiative. **The** table below includes **some** general information about these eight communities, as well as more specific data about their permitting operations.

Jurisdiction	Current estimated population	Area (square miles)	Primary industry	Annual budget	Building permits issued annually	Permit Center staff	Smart Permit budget	IT staff	Web site address
Fremont	210,000	92	high tech & manufacturing	\$93.6 million	9,000 10,000	8	\$734,000	12 FTEs	www.ci.fremont.ca.us
Milpitas	65,000	13	high tech	\$126 million	4,800	4	\$2.4 million	18 FTEs, 6 part-time	www.ci.milpitas.ca.gov
Mountain View	75,000	12	high tech	\$66 million	5,625	4	\$100,000	3 FTEs *	www.ci,mtnview.ca.us
Palo Alto	65,000	26	high tech	\$109 million	5,000	34	\$125,000	31 FTEs	www.city.palo-alto.ca.us
San Carlos	28,750	4.6	high tech, biotech & medical and R&D	\$52.8 million	2,000	3	\$300,000	3 FTEs*	www.ci.san-carlos.ca.us
San Jose	901,000	177	high tech	\$2 billion	40,000	35	\$8.3 million	88 FTEs	www.ci.san-jose.ca.us
Santa Clara	103,000	19.3	high tech	\$389.5 million	6,055	5	\$400,000	Director + 2 FTEs *	www.ci.santa-clara.ca.us
Sunnyvale	123,000	25	high tech	\$203 million	5,000	4 +7 on call	\$250,000	27 FTEs	www.ci.sunnyvale.ca.us

^{*} Jurisdiction IT staff is supported by contractorslconsultants.

Source: Smart Permit: A Blueprint for Success (Washington: Public Technology, Inc., 2001), 11–12.

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EXECUTIVE SUMMARY

The Smart Permit Initiative brought together public officials, **private** developers, architects, contractors, engineers, facility managers, *software* companies **and** others in the greater Silicon Valley, California, **area** who **were** interested in streamlining local agency permitting and development review processes. The initiative aimed **to** provide these processes on the Internet to better serve both public and **private** interests.

The results of this collaborative effort include: a reduction in the number of building code interpretations in **the** region from 400 to 11, production of a "systems requirements" document for **smart** permitting, creation of a single building permit application form, procurement of an online permit system and the development of additional "common case" enhancements. Eight pilot cities have now implemented a variety of different online **permit** system components. They continue to explore future enhancements to their permitting systems and the further integration of their permitting systems with other programs such as **GIS** and document management systems.

PROBLEM ASSESSMENT

The economy had changed dramatically in the early 1990s. Rapidly growing industry increasingly saw local government as **part** of the problem rather than **part** of the solution as **the** region emerged from the recession in 1994. Furthermore, a **report** from industry revealed that **the** cost to corporations of delaying building projects was enormous. A representative from Hewlett-Packard, for example, estimated that the company lost \$1 million for every month a permit was delayed.

A local task force concluded that the region's competitive position was hampered by local government's slow delivery of construction permits. Quite often local agencies were relying on manual permit processing and inefficient permit software. The task force concluded that permit streamlining, including the use of advanced technology, could transform the way business was being conducted in this area.

In the fall of 1994, a meeting was held between prominent members of the development community and reluctant city representatives who suspected what was coming—a need to significantly overhaul how permits were processed. One of the officials present at that meeting was Symposium panelist Mike Garvey, city manager of San Carlos. As city representatives had anticipated, the development community challenged local government in the region to significantly overhaul, streamline, and automate the development review process. Rising to **the** challenge, local government agreed. The team, under the auspices of first a public/private partnership known as Smart Valley and later Joint Venture: Silicon Valley, a regional, nonprofit civic incubator, came up with **a** plan to streamline the permitting process by doing it electronically via the Internet. Two area cities, San Carlos and Sunnyvale, agreed informally to serve **as** the initial pilot cities, with other cities in the region to follow.

PROJECT DESCRIPTION

A 1993 document produced by Joint Venture, *Blueprint for a 21st Century Community*, utilized support and input from more than 1,000 Community participants to identify thirteen priorities for regional rejuvenation. Two of the initiatives led to the Smart Permit project, to "create an electronic community by developing an advanced information infrastructure and the collective ability to use it" and "to promote an efficient, consistent and reasonable regulatory environment while maintaining high safety standards." Five-year goals related to these two initiatives included the creation of process improvement teams, a regional uniform building code, **and** an electronic clearinghouse for permits.

The two initiatives formed ajoint task force to work with local government in these areas. The task force determined that the Smart Permit initiative should respond to the following needs: a more efficient permit process to support business time-to-market pressures, more standardized and easier to understand codes to improve predictability and reliability in the permit process, the cooperation between cities and industry to better resolve permit issues, paperless documentation and storage of permit transactions, a decrease in trips to City Hall for applicants, and the ability to determine the status of a permit at any time during the process. The task force was designed to help coordinate the efforts of cities in the counties of Santa Clara, San Mateo and Southern Alameda.

Early Progress

The project initially involved Andersen Consulting and the city of **Palo** Alto in a demonstration prototype permitting system on the Internet. This prototype was developed in the **spring** of 1995. To gauge interest in pursuing this idea at a more regional level, the cities and the counties mentioned above were invited to the demonstration. The demonstration used Palo **Alto** building applications and contained a searchable archive of the Building Code and other relevant city information to assist in completing the forms. It also incorporated security, workflow, and status checking features.

Following the completion of the prototype, a Smart Permitting Steering Committee, composed of city managers, corporate facility managers, architect and design engineers, building inspectors, general contractors, city planners, and technology specialists, was **formed.**

What was becoming *the* Smart Permit project had two separate but related **primary** points of focus. The first identified which private software system(s) local agencies would utilize to electronically manage their permitting processes. The second addressed online access to this software system. Agencies also had to streamline the interpretation of the Building Codes and make various improvements to their physical workflow process for permits (**such** as consolidating their permit centers and permit information/permit review processes).

Representatives from the **permit** processing department in Milpitas and **private** development consultants participated in **a** permit process evaluation and improvement program **led** by Solectron. **A** broader effort by city and private development interests in **Santa** Clara, sponsored by Applied Materials, looked at the whole development review process and determined where process improvements could be made. **San** Carlos developed focus groups with contractors to find out what they **did** and did not **like** about its permit process. Newsletters and other methods of communication were developed to share best practices with **developers and** other agencies in the region.

As the project evolved, other points of focus were added. The city of Sunnyvale, for example, agreed to develop Internet-based software internally, as it did not believe the private vendors could deliver a robust enough Internet product to meet its specific needs in a timely fashion and did not necessarily want to be dependent on a private vendor.

Building Codes and Systems Requirements

One of the first achievements of the Smart Permit project **was** the Regional Unification of California's Uniform Building Code in 1995. Twenty-nine local building officials, working with Joint Venture, came together over a series of months to distill the 400 regional code amendments down *to* just 11. The Uniform Building Code Program **started** with a steering committee of four building officials from the cities of San Jose, Santa Clara, Sunnyvale, and Mountain View. The steering committee met several times to discuss **and** review their cities' local amendments to the Building Codes. This group **was** able to **unify** and reduce the number of amendments within their cities. Once this occurred, the steering committee invited another twenty-five jurisdictions to participate in the process. Monthly meetings were held with the building officials to discuss in detail each of their jurisdictions' local amendments. The group would then vote on the merit of each amendment and only approve *those* that were absolutely necessary.

The underlying theme was not only to reduce the number of amendments, but also to standardize them. Some political pressure was placed on the city managers by the semiconductor industry to obtain consistency amongst building officials regarding **the** application of **the** building codes. Several of the semiconductor businesses operated plants in different cities and were frustrated with the inconsistencies between cities. This **pressure** helped bring the building officials together to not only attract more companies but to also retain those already in Silicon Valley. The development community endorsed the program and actually helped to produce and distribute the amendments and interpretations agreed upon. This effort eased **the** task of building officials when the amendments were presented to their city council or board of directors for adoption.

Due to its success, and in **part** to the relocation of three of the steering committee members, the Uniform Building Code Program has spread to other regions. It remains active today in the San

Francisco Bay Area, the Monterey Bay Region, the Los Angeles Basin, and the San Diego area. In 1996 it was estimated that elimination of the amendments affected approximately 30,000 commercial and 60,000 residential projects worth more than \$2 billion. At the time experts also estimated the effort saved millions of dollars in construction costs and dramatically sped up processing.

Representatives from eighteen Bay Area cities and San Mateo and Santa Clara counties also participated in a technical subcommittee of the Smart Permit Steering Committee to explore permitting software systems. In **August** 1995, the software systems subcommittee produced "Systems Requirements for Smart Permitting." Interested permitting software vendors reviewed this document, and the final version was approved and adopted by participating cities. The "Systems Requirement" document became the basis *for* a "Request for Proposals" (RFP) that was mailed to ten permitting software vendors. Nine of the ten vendors responded. The subcommittee reviewed the proposals and held individual meetings with the vendors. **This work** resulted in an evaluation report that was released and posted on Smart Valley's website in September of that year. **A** number of local cities then became involved in **a** procurement process on an individual and collective basis using the Smart Permit RFP standards.

Concept Testing

On September 25, 1996, Smart Valley conducted two live prototype demonstrations for over 500 corporate **facility** managers, engineers, architects, and city officials. The demos used **the** Internet and **a** standard "dial **up**" connection, showcasing how existing technology could be used for permitting.

The **first** demonstration was courtesy of Associated Computer Aided Design (CAD) Services of Burlingame **and** Quarterdeck. **A** virtual conference was held between the city of **San** Carlos, Ehrlich Rominger of Los Altos (architect), and an audience at the Sunnyvale facility of **Lockheed** Martin. **A** CAD drawing representative of **a** typical permit application **was** simultaneously reviewed electronically on **a** real-time basis, code violations were discussed, the drawing marked **up** and modified, with agreements documented and archived.

The second demo was between the city of Sunnyvale and the Lockheed Martin audience. Again, on a real-time **basis**, typical building permit application forms were downloaded, completed, and submitted together with **a** *CAD* drawing. The group discovered code violations and resubmitted a modified drawing. Permits were then issued and billed. Keypoint of San **Jose** provided the Internet-compatible forms.

Pilot Cities

The fall of 1996 also saw San Carlos and Sunnyvale officially agreeing to be the region's first Smart Permit pilot cities. Each pilot city made a commitment **to** Joint Venture: Silicon Valley and to the other participants in order to receive the benefits of financial support, expert resources, and leadership. The pilot cities also brought their particular expertise and perspectives to the table and typically provided some funding. The pilot city commitment included:

- Appointing a representative to the Smart Permit Steering Committee to attend monthly meetings and participate in events
- Working collaboratively with industry and vendors
- Embracing regional cooperation and standards
- Budgeting for software, hardware and professional services
- Allocating employee(s)' time to participate
- Embracing new ways of doing things
- Streamlining permit-related business practices
- Providing necessary technology and infrastructure, including meeting minimum standards for desktops and networking
- Freely sharing keys to success and lessons learned.

Decision-makers in the two cities responded enthusiastically for the most **part** to the pilot city requirements. Usually senior city staff in **key** positions in Planning or Building were appointed to represent their city's point of view and **to** provide **support** for **the** overall permit program. Other cities such as San Jose, Santa Clara, Mountain View, **and** Milpitas had been participating informally in the overall Smart Permit process and would become **official** pilot cities over the next couple of years.

Software Development, Customization, and Testing

Having demonstrated the practicality of technology to implement permitting and the power of standard forms and processes, in January 1997, the Smart Permitting project was handed over to Joint Venture Silicon Valley and formally became "Smart Permit." Symposium presenter Mike Garvey volunteered to be a co-chair of the Steering Committee. Under Joint Venture's direction, the first operating unit of the online permit system was launched in the fall of 1997 in Sunnyvale using internally developed software. The city of San Carlos led the effort for vendor-provided software by working with the cities of Santa Clara, San Leandro, Fremont, Concord, San 'Ramon, Redwood City, Union City, and the counties of Alameda and Stanislaus, collectively known as Bay Area Smart Permit (BASP) to send out an RFP. San Carlos agreed to lend Information Technology Manager Connie Dillard to chair the effort; Santa Clara agreed to be the backup or co-chair. Another round of demonstrations by two of the top permit vendors was held. Tidemark Solutions of Seattle, Washington, was ultimately selected to develop smart permit software for the BASP software-buying consortium, and a general schedule for delivery of the Internet components was developed.

The fall of **1997** saw agreement on **a** single building **permit** application form **for** Silicon Valley. Also in 1997, **Smart** Permit's progress in the region was showcased to more than 700 interested people at **an** event in Santa Clara hosted jointly by the International Facility Managers Association (IFMA) and Joint Venture.

Smart Permit's focus in January 1998 broadened to formally include additional pilot cities: Mountain View, Santa Clara, and Milpitas. That summer the BASP consortium completed the design of their "common case" enhancements to the existing Tidemark Solutions permit software with the able cooperation of key Tidemark staff. This effort combined a number of separate Tidemark cases into a common case for a planning application, a building permit application, and related items. The group met quite regularly for many months to complete this work with Tidemark in a reasonably timely fashion. The individual agencies then had the ability to create their specific implementation contracts with Tidemark. (It was at about this time that Concord, San Ramon, and Union City withdrew active participation in the BASP group and ultimately decided not to go ahead with a Smart Permit contract with Tidemark due to database conversion, cost, and other concerns.) In October San Carlos demonstrated the first two Internet permit components of the Tidemark Solutions software at the International City/County Management Association Annual Conference in Orlando, Florida. Palo Alto became the sixth pilot city that December.

Further Development and Implementation

Milpitas began using **an** Express Permit system for simple permits using the Internet in January 1999. Sunnyvale worked with a consulting company to develop a 3-D computer model to help the community visualize possible development scenarios for the downtown **area**. That spring saw a partnership between Joint Venture, Sunnyvale, Mountain View, Microsoft, and Carta to develop **an** integrated e-commerce solution for simple permits. Mountain View estimated these "simple permits" **comprise** over 50% of its building department's 6,000 permits issued annually. The Smart Permit project received an award for Outstanding Public Technology Program from the Silicon Valley Chapter of the American Society of Public Administration. Fremont also became a pilot city.

During this same time period Joint Venture worked with a consultant, Psornas, to develop a feasibility study of a regional Smart GIS mapping system. This followed a Silicon Valley 2010 Plan coordinated by Joint Venture through numerous community meetings. At **the** time many citizens commented that cities in **the** region should collaborate to create a regional GYS portal to help users obtain local agency information. While under contract with Joint Venture, Psomas had also helped the pilot cities develop some web-based permit entry forms. San Carlos also activated a number of components of the Tidemark permit software on the Internet (Permit Status, Citizen Comment, and later Parcel and Zoning inquiry and eMobile for wireless access to permit data by inspectors in the field). Mid-year Santa Clara tested an electronic drawing submittal and collaboration software with Blueline Online (which later became part of Citadon). The test used an actual development project going through the city's public hearing process at planning commission and city council. The Blueline site was also linked to the city's website to help facilitate community review. That fall Santa Clara also went live with the Tidemark software program at staff level as well as with an Integrated Voice Response (IVR) system allowing customers to use their phone to call for inspections and later to review plan check status. Sunnyvale also activated their e-permits.net system, enabling contractors and property owners to apply for simple permits online. (Sunnyvale would later agree to a partnership with GovPartner, an affiliate of Berryman-Henigar, and offer its program to other agencies as PermitPartner. Mountain View would also formally agree to work with GovPartner.) San Jose officially became a pilot city, though it had been informally involved in the process for several years. FMA and Joint Venture hosted another update on Smart Permit at the San Jose Tech Museum.

The year 2000 saw San Jose, with the aid of Synertech and Integraph consultants, debut online processing for high-volume simple permits. San Jose sought to create a virtual one-stop development permit center to make it easy for customers to apply for and receive high volume, simple permits via the Internet. Santa Clara began initial testing of the Tidemark Internet product. It also tested online plan submission using the Buzzsaw.com project website (Buzzsaw.com is an affiliate of Autodesk that utilizes Autodesk's electronic plan review/markup program). Palo Alto put permit information on the web along with its in-house system working with OpenData Systems. San Carlos also tested 3-D tools to help the community visualize possible downtown development scenarios. The Smart Permit effort was also selected by Public Technology, Inc. (PTI) to receive its Solutions award, which recognizes the development of technologies that improve local government service delivery.

Wrapping Up

Late in 2000, the Smart Permit Steering Committee began working with Joint Venture and Public Technology, Inc. (PTI) to write a book on the Smart Permit process. Collaboration on the book continued to be the princry focus of the committee in early 2001, after which the committee assisted Joint Venture staff with the preparation for the release of the book at a November event in San Jose. During the event each city had an opportunity to highlight their accomplishments and to comment on future directions in smart permitting. San Jose, for instance, noted the progress it had made with a now very active Permits Online program and their efforts to further integrate the permit program with the city's GIS and Document Management Systems. The cities of Campbell and Morgan Hill also became actively involved in the BASP group. A number of the pilot cities went through one or more upgrades of their permit sofhvare by this time, as well, as their programs continued to evolve. Work being undertaken by the various agencies in 2002 is discussed in the following sections.

COSTS

Joint Venture provided approximately \$2.4 million in overall coordination costs for Smart Permit, which included \$1.2 million in consultant costs for the pilot cities, during the six-year span of this initiative.

Direct individual agency costs varied depending on the number of staff participating in a significant way in the initiative; the need to upgrade agency hardware, software, network, and Internet infrastructure; and related efforts. At a minimum, one to two staff people were involved part-time from each agency during the lifespan of the project. Related capital costs included necessary equipment, infrastructure, and software. Agencies with larger budgets typically had some staff working full-time on this project. City budgets for this program (as of 2001) ranged from approximately \$100,000 in Mountain View, \$125,000 in Palo Alto, \$250,000 in Sunnyvale, \$300,000 in San Carlos, more than \$400,000 in Santa Clara, \$734,000 in Fremont, to \$8.3 million in San Jose. City department heads worked with their respective staff, city managers, and decision-makers to create the necessary funding, often from several revenue sources and, for most of the agencies, over several years. These costs typically do not include related streamlining efforts (such as the city of Santa Clara's creation of a one-stop permit center at their City Hall in 1995). It is safe to say that some efforts (such as the work done by BASP) involved more staff time from the agencies than was originally envisioned. This was true, in part, because the full

potential of what could be accomplished became more apparent once the individuals **and** agencies got into the details of *the* work.

RESULTS

Over a period of six years (1995-2001) processes were improved, technology was developed and then deployed, and the region collaborated to roll out a number of permit applications on the Internet. The regional Building Code interpretations were reduced from over 400 to 11; information about permits became available online through San Carlos and Santa Clara; simple permits went online in Milpitas, Mountain View, Sunnyvale, and San Jose; and online comment on public hearing items became available in San Carlos. Customers are also able to phone in to request inspections and review permit plan check status in some of the jurisdictions. Some progress on digital signatures and online plan check reviews has also made. San Jose, for instance, has a complete permit application package online for permits including the ability to use digital signatures. Mountain View has a fully deployed payment system for online permits.

Many different individuals and groups have benefited from these improvements, including architects, building designers, contractors, homeowners, small businesses, large businesses, facility managers, and retailers. Contractors, for example, have been very pleased with the IVR systems for calling in inspection requests in Santa Clara and then later for the status of plan checks. The call volume dropped off significantly to the city's building division for routine items pertaining to inspections. This has allowed the secretaries and others to get to other work, and more complex work, done more quickly. San Carlos has reported great enthusiasm among customers who use their online permit and parcel status programs. These systems have also benefited Iocal agency staff, who quite often can access the information exactly the same way the customers do, enabling them to help members of the public who may have questions about how to use these systems. Staff using an Internet browser to access these programs may also somewhat reduce the number of concurrent permit software licenses agencies might otherwise pay for.

The fall 2001 Joint Venture/PTI book by the pilot cities was the last formal effort of the Smart Permit Steering Committee. It was also the official closing out of this initiative by Joint Venture in the region, although former members of the Committee do make presentations on the initiative to various groups from time to time as Joint Venture and local agencies receive these requests and have the ability to respond. San Carlos and the BASP Consortium are continuing to examine enhancements to the Smart Permit program shared cases developed with Tidemark (now a part of Accela.com), reviewing additional ways to share development-related cases and the relationships to related programs such as GIS and document management. Other Smart Permit pilot cities are looking to further evolve their permit online, GIS, and Document Management systems. San Jose, with a significant investment of time, money, staff, and consultant resources, has been able to fully integrate these three components. This integration allows its staff to retrieve all project documents associated with a project, which is remarkable given the size and complexity of the city.

Fremont is working with Access systems to allow online public access to city permits and other files. Santa Clara upgraded its Tidemark software, conducted further tests of the Internet/e-

commerce program, and began testing handheld units for Building Inspectors to take out to the field. Synergetic Consulting has been working with Santa Clara and several of the other BASP cities on further uses of their permit programs. Mountain View reports approximately ten percent of their monthly building permits (35-40) are now being processed and paid **for** online. Palo Alto is working with Accela.com to pilot a new Internet-based permitting system. They have also been using 3-D modeling technology in their community planning process, allowing users to visualize alternative land use concepts and building proposals.

Project funding **that** began as **a** one-year capital improvement program for Smart Permit in local agencies typically had to be renewed or expanded in subsequent years. Some costs, such as additional staffing **and** ongoing software **and** hardware maintenance quite often shifted over into ongoing operating **costs** in later **years** as systems came online. Over time, continued investment in Smart Permit is becoming a **standard part** of most agencies' annual operating budget planning, although as noted below, this is not always assured. **Expanded** online **permit** offerings and related developments generally continue **to** be planned and created **as** Smart Permit cities in **the** region continue to find **ways** to evolve these systems.

Key Factors Influencing Smart Permit Progress

A number of **key** factors influenced the progress of the region's Smart Permit project and similar occurrences may be indicators of the potential for **Smart Permit** projects in other communities:

- Rapid exponential growth in the acceptance **and** use of the Internet in the community.
- Technology advancements in networking, software and desktop tools.
- Publication of a series of Permitting Best Practices documents.
- Creation of a Uniform Building Code Program to facilitate standardized building code amendment interpretations, a reduction in building code amendments in the region, and a standardized building permit application and related forms. The local building officials were really key in bringing this about in this region. While some standard forms were created for public use relating to building permits and standard engineering applications, this effort sputtered out in the region when it came time to discuss a possible standard Planning application that all the agencies could use.
- Commitment by private and public interests to come together to collaborate across agencies and areas of expertise to improve and continually (or at least periodically) review and further advance the permitting process. The Smart Permit Steering Committee, for example, worked well together during the come of their formal responsibilities and informally since Joint Venture closed out the initiative. The BASP group agreed to work together without a formal Joint Powers or other agreements between the various agencies and has done so since 1997.

A willingness to commit the necessary agency/consultant resources to get the job done as desired by the community is one of the most important ingredients. This has been a challenge for many of the jurisdictions in the past year as the economy has slowed and revenues have flattened or declined. The business technology community has also not typically been pressing local government departments and agency decision-makers to continue evolving the Smart Permit effort in the region to the extent they were in the mid-1990s. This makes it more tempting for local agencies to slow down or stop new work in this area. Yet the long-term cost-savings and

benefits to the community remain from leveraging effective technologies such as the IVR, GIS, and Internet permit systems.

Smart Permit Predictions

Rapid developments in technology and the changing nature of government will lead communities to imagine and create new levels of smart permitting. Based on their experience, participants in the region offer these predictions:

- Standards for digital signature technology will emerge and its use will become pervasive where it is required/allowed.
- The use of emerging tools such as Internet collaboration software and 3-D modeling will become mainstream in the permit and development review process.
- Access to the permit system via wireless devices such as cell phones, laptop computers, and handheld computers will become routine.
- Online plan submission and plan checking tools will mature **and** become easier to use.
- Building codes, zoning regulations, and other permit-dated rules and guidelines will be available electronically and linked to the permit systems.
- Online **plan** checking and redlining will be similar in approach to today's grammar checking in text documents.
- "Whiteboarding," or the use of online collaboration tools will become prevalent.
- Document management technology will become ubiquitous, and organizations will move closer to paperless operations.
- Use of Application Service Providers (ASPs) to host government systems such as permit
 programs will increase in smaller agencies to address difficulty retaining IT staff and to
 lower the cost of owning technology.
- Planning will become less of an art and more of a science through the use of interactive planning tools.
- Smart permitting will **be** integrated into the supply chain.
- Adoption of regional GIS standards will support real-time access to planning and development activities in surrounding communities. The regional GIS effort is one area that has taken longer to evolve than was originally anticipated in 1998–99. The region still has a vision to create a regional GIS portal through which users can obtain permit and other data from all jurisdictions within the Silicon Valley area.
- Disparate information sources will be integrated to create a cohesive planning and community development tool.
- Smart permitting workflow will be integrated into the overall development process.

Other communities outside the region (such as the Los Angeles-San Diego area mentioned earlier) have begun to embrace some of these concepts but typically not at the level experienced here. Planning, Fire, Information Technology, and Finance Departments in some of the participating agencies in the region where not as involved (or not invited to be as involved) in

these efforts as they might have been. This is a matter that each local agency in consultation with its city manager or county executive must decide as **the** resource/coordination demands will increase significantly with the number of agency departments involved.

Larger Trends Affecting Smart Permitting

Several larger trends will shape the future of smart permitting. These trends include online access, enterprise information systems, electronic government, security, and regionalism.

In addition to widespread Internet access in the workplace, **people** now have wired *access* from home, school, libraries, and community centers, and increasingly, wireless **access** as well. Rather than go to city hall during the workday, **people** will use the Internet **to** access services when it **is** most convenient for them. Cities have begun to respond with smart permitting and other electronic service initiatives. **As** cities shift to online information **and** services, **they** will need *to* work with community groups **and** service providers to make *sure* that everyone has affordable online access and that these services are reliably provided outside of typical office hours. Until online access becomes common for **all**, agencies will need **to work** hard to provide **as** much access **as** they (and their constituents) can **support**. This may mean **that** older systems may need **to** be cobbled together.

The growing trend in private industry to integrate disparate systems into **a** single, cohesive, enterprise information management system will eventually reach **local** government. Local government's **approach** to technology typically has been **a** department-by-department solution for each business function, such **as** permitting vs. parks and rec programs. These systems often come from multiple vendors, use different technologies, **and** lack robust interfaces to **support** information sharing. In the future, smart permitting should be just one module of an integrated enterprise system using emerging technologies.

Electronic government leverages Internet access and enterprise information management systems to offer access to services. A "virtual city hall" working 24 x 7 overcomes the constraints of traditional office hours and systems. Permit status checking and online comments on proposed development projects were first steps for the permit process. Being able to view 3-D models of your community, proposed development projects, and surrounding areas would also be quite useful. E-permitting, one of the first e-government initiatives, will become just one of many online government services.

Software systems by the nature of their typical design and short lifespan in the market are works in progress and most likely will continue to have bugs and potential security issues. Software systems interacting with the Internet will continue to be tempting security targets for certain individuals or groups. As such, local agencies will have to remain vigilant about reasonable security balanced with the competing desires for widespread access to and use of public agency services.

Smart Permit is more than a one-time project for local government, residents, contractors, developers, and other stakeholders in the permit and development review process. It is an ongoing opportunity to collaboratively improve the permit and development review process for everyone involved and can serve as a model for other local government initiatives. This initiative

shows how public agencies can work together with the private sector to solve problems, be more responsive to community needs, and provide **a** twenty-four hour, seven days-a-week city hall.

"Ultimately, electronic service delivey such as Smart Permitting needs to be ubiquitous, a familiar avenue across the county and not just in Silicon Valley. It needs to become a way of doing business."

Randy Tsuda, former Smart Permit Director
Joint Venture: Silicon Valley Network

SMART PERMIT READINESS QUIZ

How do you **know** if your organization is ready to undertake **smart** permitting? The more positive answers to this quiz, **the** more likely you are ready for smart permitting.

Technical Readiness

- 1. Does your organization have a stable enterprise-wide network with capacity to support increased usage?
- 2. Does your organization have an enterprise messaging system, i.e., electronic mail?
- 3. Is your organization's network connected to the Internet and safeguarded against intrusion, i.e. **are** a firewall and other security measures in **place?**
- 4. Does your organization have a Web site?
- 5. Do you have a reliable telephone system?
- **6.** Do you have permit-related applications in place? If so, are they in-house developed, customized, or commercial "off the shelf" programs?

Organizational Readiness

- 1. **Are** the drivers, goals, and objectives for the initiative clearly defined and accepted?
- 2. **Is the** organization committed **to** improving the permitting process, i.e. ready to commit resources including funding and employees' time?
- 3. Has the organization identified high-level Smart Permit champions?
- 4. Is **the** organization, at all levels, open to criticism and ready to **make changes** to address them?
- 5. Will the organization spend the time to first streamline and improve **the** permitting

- 7. Will you keep the ones you have in place, building upon them toward an integrated smart permitting system, or should you start over?
- 8. Is the primary application architecture terminal, client/server, or **browser-based?**
- **9.** Do existing **applications** use relational databases?
- 10. What end-user **tools does** your organization use **today?**
- 11. *Are* they capable of running the latest operating systems and application programs?
- 12. **Are** current **applications** capable of supporting remote **access?**
 - process **before** implementing **new** technology?
- 5. Does the organization **have** personnel with the **skills** necessary to complete process improvement efforts **or have** outside resources been identified?
- 7. Have **vendor** partners been identified or **do** positive vendor relationships already exist that can support smart permit efforts?
- 3. Have potential roadblocks relating to legislation, policies or procedures been identified and have strategies been developed?

Community Readiness

- 1. Is the business community ready to participate?
- 2. Do permit, planning or building related groups exist that will participate?
- 3. Has any public outreach occurred?
- **4.** Does your community **have** broadband telecommunications infrastructure in place to allow government, businesses, and citizens to **support** online service delivery?

- 5. **Do** the business in your community have interest in online permitting and the tools necessary to use it?
- 6. Do a substantial number of your homeowners have the technology necessary to participate in electronic permitting?

Regional Readiness

- 1. Does **a regional** oversight body exist to facilitate and lead the effort?
- 2. Has a steering committee been established with participation from all stake-holders
- 3. Is **the** organization ready to adopt regional standards **and** regulatory interpretations?
- **4. Is** the organization ready to share strategies for success and lessons **learned?**

Credits, Resource Links, and Supplemental Materials:

Blueprint for a 21st Century Community, Joint Venture: Silicon Valley 7993.

- Cultivating a Smart Valley: A History of Smart Valley, Inc. by Justine Cogan (Smart Valley Press, 1998), 31-34.
- 'Automated Permitting With Smart Permits' by Arthur E. Henriques, **Spring** 1999, **paper for** the National Planning Conference of the **American** Planning Association.
- Smart Permit: A Blueprint for Success, a collaborative book by Zoe Francesca, Karen Greenwood, Liza Lowery, and Rod Massey written for Joint Venture: Silicon Valley Network and Public Technology International, 2001.
- Interviews/ phone/ e-mail discussions with Sheila Lee, Ron Geary, Rod Massey, Mike *Garvey*, and other former **Smart** Permit Steering Committee members, 2001-2002.
- Discussions regarding Building Code Streamlining with Dave Pasquinelli, Development and Permit Services Director, City of Salinas (formerly the Building Official, City of Santa Clara), March 2002. 831-758-7251, Davidpa@ci.salinas.ca.us.

Various annual and other reports from Joint Venture: Silicon Valley.

Joint Venture: Silicon Valley web site (includes links to all the **Smart** Permit pilot cities): http://www.jointventure.org/initiatives/smartpermit/pilot.html

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City of San Carlos
BASP Chair
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http://www.ci.san-carlos.ca.us

Public Technology Inc. 1301Pennsylvania **Avenue**, NW Suite 800 Washington, DC 20004 202-626-2400 http://www.pti.org Accela http://www.accela.com

Autodesk, Inc.

http://www.autodesk.com/

Berryman & Hennigar http://www.bhinc.com/

Buzzsaw.com http:I/www.buzzsaw.com Citadon http://www.citadon.com

Psornas Riverside, CA http://www.psomas.com/what.cfm

Synergetic Consulting Reno, Nevada http://www.e-syncon.com Smart Permit

Now you can get a building permit on-line!



No more Standing in line and no more parking problems

Track your projects and more from your house or office

Architects, Facility Managers, Contractors & Inspectors Join us for a *free* 2 hour workshop and lunch.

January 31,2001 12:00pm - 2:00pm

Roofers Union Local 95 293 Brokaw Road Cross street: Coleman Santa Clara, CA (408) 987-0440

Name ______Organization ______

Phone _____e-mail _____# of attendees ______

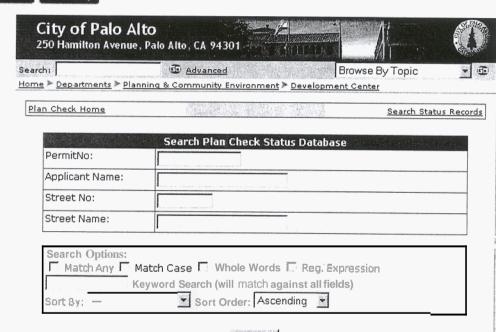


Please RSVP: L_Bruner@jointventure.org Or Fax (408) 271-7214





When you enter the project address, please be sure you have the correct spelling and suffix.



Search Online Permit Application SAN JOSE City Home Permit Home Step 1 of 6: Enter Project Address <u>Requirements</u> • Step 1: Enter Project Address Step 3: Select Permit options Step 5: Pay Fees Step 2: Enter Applicant Information Step 4: Save Permit Step 6: Print Application Application steps Please enter the pmject address. The address must be within the city of San Jose, CA. For instructions on how to find a specific address, click on Address Search. Online permit Types Street Number: Fee Direction: -- -Information Street Name: Feedback Suffix: --Unit/Apt Number: Building Type: 1 Family Your relationship to this project: m extstyle C I am the property owner or owner-builder C I am the contractor Digital Signatures C I will be signing the normit manually and mailing it in

SMART PERMIT STANDARDIZED PERMIT APPLICATION

This application may be used in: Alarneda County, Concord, Fremont, Milpitas, Mountain View, Palo Alto, Redwood City, San Carlos, Santa Clara San Leandro, Stanislaus County, Sunnyvale. Union City

PLEASE PRINT NAME:

APPLICATION

DATE:	
APPLICATION NUMBER:	
Plan Check Number:	

Please print clearly ar	wifill in all that apply
PROJECT ADDRESS:	
☐ PROPERTY OWNER ☐ TENANT	
NAME:	LICENSE / REGISTRATION #:
ADDRESS:	NAME:
CITYISTATWZIP:	COMPANY NAME:
PHONE #: ()	ADDRESS:
E-MAIL ADDRESS:	CITY/STATE/ZIP:
TENANT COMPANY NAME:	PHONE #: () FAX#: _()
Jurisdictions may require written approval from the owner.	EMAIL ADDRESS:
PROJECT CONTACT PERSON:	PHONE#: FAX#:
ADDRESS:	E-MAILADDRESS:
☐ CONTRACTOR	OWNER-BUILDER
LICENSE# LICENSE CLASS:	PHONE #: _()
COMPANYINAME:	FAX#:()
ADDRESS:	E-MAIL ADDRESS:
CITY/STATE/ZIP:	BUSINESS LICENSE #:
Business and Professions Code, and my license is In full force and effect.	licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the
OWNER-BUILDERDECLARATION: Ihereby affirm underpenalty of perjury that I am exempt from Any city or county which requires a permit to construct, alter, improve, demolish, or repair any struct to file a signed statement that he or she is licensed pursuants the provisions of the Contractors Lic Code] or that he or she is exempt therefrom and this basis for the alleged exemption. Any violation civil penalty of not more than filve hundred dollars (\$500).): In as owner of the property, or my employees with wages a stheir sole compensation, will de the value of the Contractors License Law does not apply to an owner of property who builds or improves thereform employees, provided that such improvements are not intended or offered forsale. If however, the of proving that he or she did not build or improve for the purpose of sale.) In as owner of the property, am exclusively contracting with licensed contractors to construct to does not apply to an owner of property who builds or improves thereon, and who contracts for such lam exempt under Sec. I am exempt under Sec. Owner:	icture, prior Witts Issuance, also requires the applicant for such permit ense Law (Chapter 9 commencing with Section 7000) of Division 3 of the Business and Professions el Section 7031.5 by any applicant for a permit subjects the applicant to a work, and the structure is not intended or ^{offered} for sale (Sec. 7044, Business and Professions Cods: on, and who does such work himself or herself or through his or her building or improvement assold within one par of completion, the owner-builder will have the burden he project (Sec. 7044, Business and Professions Code: The Contractors License Law projects with a contractor(s) licensed pursuant to the Contractors License Law.)
WORKERS COMPENSATIONDECLARATION: 1 hereby affirm under penalty of perjury one of the	o following deplarations:
I have and will maintain a certificate of consent to self-insure for workers' compensation, as or this permit is issued. I have and will maintain workers' compensation insurance as required by Section 3700 of the compensation insurance carrier and policy numberare:	ovided for by Section 3700 of the Labor Cods, for the performance of the work for which
CARRIER: (This section need not be completed if the permit is for One hundred dollars (\$100) or less.)	POLICY#
	nny person In any manner so as to become subject to the workers' compensation laws of California, of the Labor Cods, I shall forthwith comply with those provisions.
DATE: APPLICANT: WARNING: Failure to secure workers' compensation coverage is unlawful, and shall subject an em in addition to the cost of compensation, damages as provided for in Section 3706 of the Labor Code	ployer to criminal penalties and civil fines up to one hundred thousand dollars (\$100,000), s, interest, and attorney's fees.
CONSTRUCTION 1 FUNDING AGENCY: thereby affirm under penalty of perjury that there is a construction lending agency for me performs.	ormanceof the work for which this permit is issued(Sec. 3097, Civ. C.).
Lender's Name: Lender	er's Address:
I certify that I have read this application and state that the above information is correct. I agr and hereby authorize representatives of this county to enter upon the above-mentioned prop	ee to comply with all city and county ordinances and state laws relating to building construction, erty for inspection purposes.
SIGNATURE OF APPLICANT OR AGENT:	DATE:

		BUILDING PERI	MIT APPLICATIO	N WORKSHEE	ĒΤ	- Page 2
	,	PLEASE PRINT CL	EARLY AND FILL IN	ALL THAT APPL		and the second second
TYPE OF CONSTRUCTION	l:	OCCUPANCY	ZONI	Ē:	FIRE SPRINKLERS	🗆 YES 🗇 NO
HAZARDOUS MATERIALS	YES NOD	EXISTING USE		PROPOSI	ED USE:	
ASSESSOR'S PARCEL#: _						
DESCRIPTION OF WORK:	(Please fill-in a	nd mark all that apply)				
		□ NONE	CONSTRUC ESIDENTIAL RI		l: \$	
☐ New Building ☐ Move Building ☐ Tenant Improvement ☐ Other	☐ Addition ☐ Fire Sprinkl☐ Swimming	ers ☐ Alter ers ☐ Sign Cool/Spa ☐ Fire Coon	ration ☐ Term	ite/Dry Rot Repai dationOnly ir / Retrofit ditional Informatio	Tree Remov	emolish himney Repair val d)
Description:						
DESCRIPTION OF BUILDIN	LG: (Pleasefill-in	and mark all that app	ly)			
☐ Office/Bank/Professions ☐ Hotel/Motel ☐ Restaurant ☐ City/County Owned	al □ Single Fam □ Ar □ Ac □ Cl	ily 🛱 Duplex nusement/Recreation ccessory Building nurch/Assembly	☐ Townhouse ☐ Indus ☐ Histo ☐ Store	Condominiur strial Ser rical Ed	n ☐ A _l Vice Station ucational/School er	partment Building Medical Building
Building Area:		Sq. Ft. Building	Height:		Ft. Stories	S:
EXISTING: FLOOR AREA	A	GARAGE_		OTHER	# UNITS	- not the minima too square
ADDITIONAL PROPOSED:	FLOOR AREA	G	ARAGE	OTHER_	#	UNITS
Number of Bedrooms:	Numb	er of Bathrooms:	Total Numb	er of Rooms:		
Lot Size (Sq.Ft.);	<i>Lot</i> Di	mension (Front/Side/R	tear):/	/	Coverage %:	
Setbacks: FRONT:		REAR	LEFT:		RIGHT	
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	VERIFY WORKE	RS COMPENSATION	EXPIRA	TION DATE:		The second second
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Smart Permit Meeting

June 8,2000 3:00 PM to 5:00 PM West Conference Room City of Sunnyvale 456 West Olive 408.730.7500

Type of meeting: Smart Permit Steering Committee

Time:	Objective	Agenda Topics	Presenters
3:00		Welcome/Agenda Review/Announcements Greg Larson	Mike Garvey
3:05	1,3	Update on Online Plancheck (Volo Explorer) Webcor & City & Santa Clarapilot Volo View Due out in a few weeks.	Glen Gabel Sheila Lee
3:20		SMARTPERMIT.ORG Status & Goals	Zane Paxton
3:25	1,4	Marketing/Promotion Strategy for Smart Permit: Follow-up report on participation in "Howto" fur Electrical Contractors and Roofing Contractors	Glen Gable Bob Kraiss
4:00	2,4	Update on Priority Activities & Remaining Objectives Objective 2: Lessons Learned Objective 4: Final Implementation Plans for each City	Mike Garvey/Zane
4:35 4:35	2, 4	Update from Pilot Cities: Roundtable	Cities/Zane
4:55	2	Update on Consortium Activities	Art Henriques
5:00		Adjourn/Next Meeting July 13, 2000`	Mike Garvey



Smart Permit Meeting

June 8.2000 3:00 PM to 500 PM

Smart Permit FY 1999-7000 Measurable **Objectives**

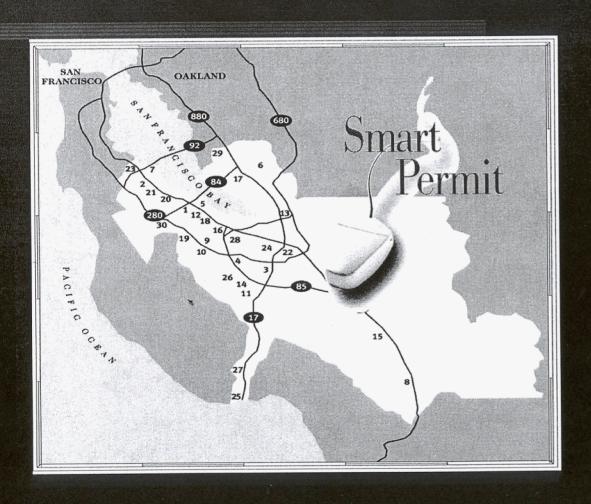
- Create an awareness program to make the AEC industry aware of the Smart Permit functions available in each city. Provide information on website to support awareness program.
- 2. Begin a formal program for sharing "lessons learned" among pilot cities. Author a draft guidebook and hold a workshop on the "lessons learned" from the Smart Permit pilot cities.
- 3. Establish technology partnerships in digital signature, document management, e-commerce, CAD markup and online collaboration. Apply at least two of the technologies in each pilot city.
- 4. Identify the key components, process requirements and system requirements of Smart Permit that expand into Electronic City Hall. Complete a regional assessment of municipal, residential and industrial/AEC readiness to implement Smart Permit. Compare components and systems against readiness. Create a plan to add the missing components and systems to each pilot city.
- 5. Create a strategic plan for a regional online GIS project.

Comleted Objectives:

- 1. Co-host with IFMA a Smart Permit showcase on October 27, 1999. Feature the work & the pilot cities and technology partners. Target 1000 person attendance.
- 2. Establish San Jose as a pilot city

Lead	Priority Activities	Status
Zane Paxton	Regional AEC Technology Survey Report	In progress
Lee Vandiver Zane Paxton	Support Microsft E-Commerce Solution	Live in Sunnyvale (http://www.e-permits.net). Mountain View live in 2000?
Zane Paxton	Support state CBAE/Digital Signature Trust pilot effort	Live http://www.digsigtrust.com/projects/cbae.html
Zane Paxton	Support use of Volo Explorer	See Agenda
Staff	Identify new technology partners	On hold.
Rod Massey	Regional GIS Activities	Schedule roundtable meetings to discuss goals/vision. Mtgs: April 25, May 30 – e-mil notes attached
Art Henriques	Support and coordinate with Consortium group	See Agenda

Project Description



1,500 square miles

Population approx.

2.5 million

28 city & 3 county jurisdictions

Collaboration across the Region

Aughitante, Engineere,

Construction Industry

(DES, Erlich Rominger, MBT, Webcor)

E H R L J C H · R O M J N G E R





Consultants

(PSOMAS, Jacobs Fulton, Land Systems Group)

- ·Regional Standards
- •HTML Forms
- Integration

PSOMAS

Silicon Valley Manufacturing Group

(Organizing 125 Silicon Valley member companies in a cooperative effort with the government to address major public policy issues)

- · Early adopters
- · Application Form Help Screens

SMART PERMIT INITIATIVE



Stanford University

(Center for Integrated Facility Engineering)

- · Emerging Technology
- · New Information Technologies in the A/E/C Industry



Pilot Cities (Milpitas, Mountain View, Palo Alto, San Carlos, Santa Clara, Sunnyvale)

- Computerized Data System
- · Automated Permit Tracking
- •Internet Accessible Features
- •E-Commerce
- ·Whiteboarding







Software/ Hardware Companies

(Autodesk, Digital, Digital Signature Trust Microsoft, Tidemark Computer Systems)

- •In concentrabled permits
- •CADD
- •GIS •Web Viewers











Bay Area Smart Permit Consortium



Fremont, Redwood City, San Carlos San Leandro San

Santa Clara, Stan is laus County)



- . Development of Standard Application Forms
- Development of Permit Tracking Software with Tidemark



Concord





